

## AN EPILOBIUM UNDER ESTUARINE CONDITIONS.

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THE distinguishing characteristic of the tribe *Epilobiae* of the *Onagraceae* is the tuft of hair, or coma, on the seeds, but the writer finds in a collection made during the summer of 1923 by Mr. H. K. Svenson and himself a plant which exactly matches *Epilobium glandulosum* Lehm., var. *adenocaulon* (Haussk.) Fernald<sup>1</sup> in every character except that the seeds have no suggestion of a coma. This plant was collected on the tidal flats of the St. Lawrence River at St. Vallier, some twenty miles below the city of Quebec, and examination of the specimens in the Gray Herbarium shows that the same form was collected a year earlier by Professors M. L. Fernald and A. S. Pease at Berthier, ten miles below St. Vallier.

According to Hildebrand,<sup>2</sup> who investigated *E. hirsutum*, the coma is formed while the flower is still in bud, long before fertilization has taken place. But in this form from the shores of the St. Lawrence there is no trace of a coma at any stage, either before or after the bud has opened, so we may not consider that the coma is lost, but that it does not develop at all, and that this is perhaps a reversion to an earlier type.

Ordinary plants of wet habitats take on strange forms and often undergo reversions when they become well established upon estuaries, as, for example, *Leersia oryzoides* (L.) Sw., forma *glabra* A. A. Eaton,<sup>3</sup> of the tidal flats of the Merrimac and Kennebec Rivers, which has not only lost its scabrosity, but has become cleistogamous, and *Sium suave* Walt., forma *fasciculatum* Fassett,<sup>4</sup> of the Kennebec River estuary, which is prostrate, rooting at the nodes, with fascicles of simple leaves which are of the same form as those of the seedlings of the normal plant. It is possible that the plant under discussion has adapted itself to estuary conditions, where the seeds may be carried off by the rising water; that is, a normally wind-disseminated plant has become water-disseminated.

EPILOBIUM GLANDULOSUM Lehm., var. **ecomosum**, var. nova, varietatem *adenocaulon* simulans, sed seminibus comam carentibus.

<sup>1</sup> RHODORA, xx. 35 (1918).

<sup>2</sup> Bot. Zeit. xxx. 235 (1872).

<sup>3</sup> RHODORA, v. 118 (1903).

<sup>4</sup> RHODORA, xxiii. 111 (1921).

Like variety *adenocaulon*, but with the seeds destitute of coma. PROVINCE OF QUEBEC: shaly beach of the River St. Lawrence, Berthier, Montmagny Co., July 14, 1922, *Fernald & Pease*, no. 25196; rocky tidal shore of the St. Lawrence, St. Vallier, Aug. 9, 1923, *Svenson & Fassett*, no. 874 (TYPE in Gray Herb.).

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## ANOTHER DAVENPORT FERN HERBARIUM.

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PROBABLY most fern students in America know that the Davenport Fern Herbarium is the property of the Massachusetts Horticultural Society and is kept in their building in Boston. It consists of specimens of the ferns known, at the time when it was formed, to occur in North America north of Mexico, carefully selected, where selection was possible, to show the characteristics and range of variation of each species, with a few extra-limital specimens for comparison. Its extent is still indicated with a fair degree of accuracy by the Catalogue of 1879 and the supplement thereto of 1883, though after the latter date Davenport added occasional sheets of newly discovered species or of old ones whose representation he thought inadequate. It contains the types of the following species and varieties:—*Aspidium simulatum*, *Cheilanthes fibrillosa*, *C. Parishii*, *C. Pringlei*, *C. villosa*, *C. viscida*, *Cystopteris fragilis*, var. *laciniata*, *Notholaena Grayi*, *N. Schaffneri*, var. *mexicana*, and *Pellaea Wrightiana*, var. *compacta*. Critical notes by Davenport himself and letters from Asa Gray, J. G. Baker, and D. C. Eaton are now and then pasted into the folders which contain the specimens. Altogether, the collection is of more than ordinary interest.

But Davenport's herbarium-making was not confined within the limits set for this collection. Almost up to the time of his death in 1907, he continued to acquire specimens from many parts of the world. The resultant collection remained in the possession of his family until December, 1922, when it was given to the Gray Herbarium by his daughter, Miss Mary Elizabeth Davenport. As there received, it numbered about 4500 sheets, of which perhaps 150 were flowering plants, mosses, and algae, the remainder ferns. Nearly all of them were unmounted, and they had apparently never been fully organized.